WORK SAMPLES
Kyle Branchesi

The Massachusetts Institute of Technology
The Southern California Institute of Architecture

–

The Office of HH The Crown Prince of Dubai
Gianni Ranaulo Design
Neil M Denari Architects
Testa / Weiser

–

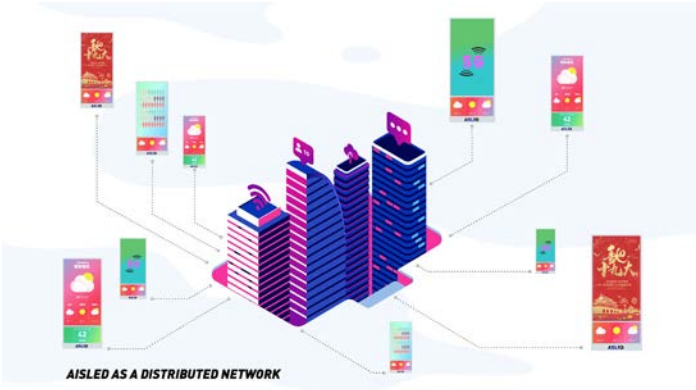
kylebranchesi.com
linkedin.com/in/kjbranchesi

AISLED : Making Smart Cities Visible

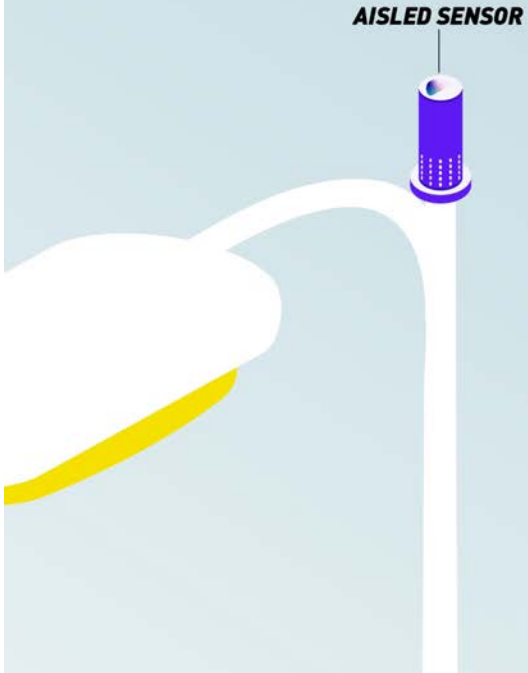
Team : Kyle Branchesi, Nathaniel Elberfeld

Recognition : MIT Sandbox Entrepreneurship Grant, MIT Future City Innovation Connector Grant

AISLED is a series of smart networked displays that sense the environment in real-time and displays relevant data back to the community. AISLED is able to provide community members hyper local weather information, including temperature, humidity, air quality index and noise pollution levels. Current transit information is displayed for efficient commuting. In the future it can also be used a relay station for 5G network deployment. When integrated as a network local municipalities are able to understand foot traffic patterns, micro climates, and air quality levels on a block-by-block basis. AISLED examines big-data at a hyper-local level providing community members with the agency they need to make meaningful changes to their environment.



AISLED AS A DISTRIBUTED NETWORK

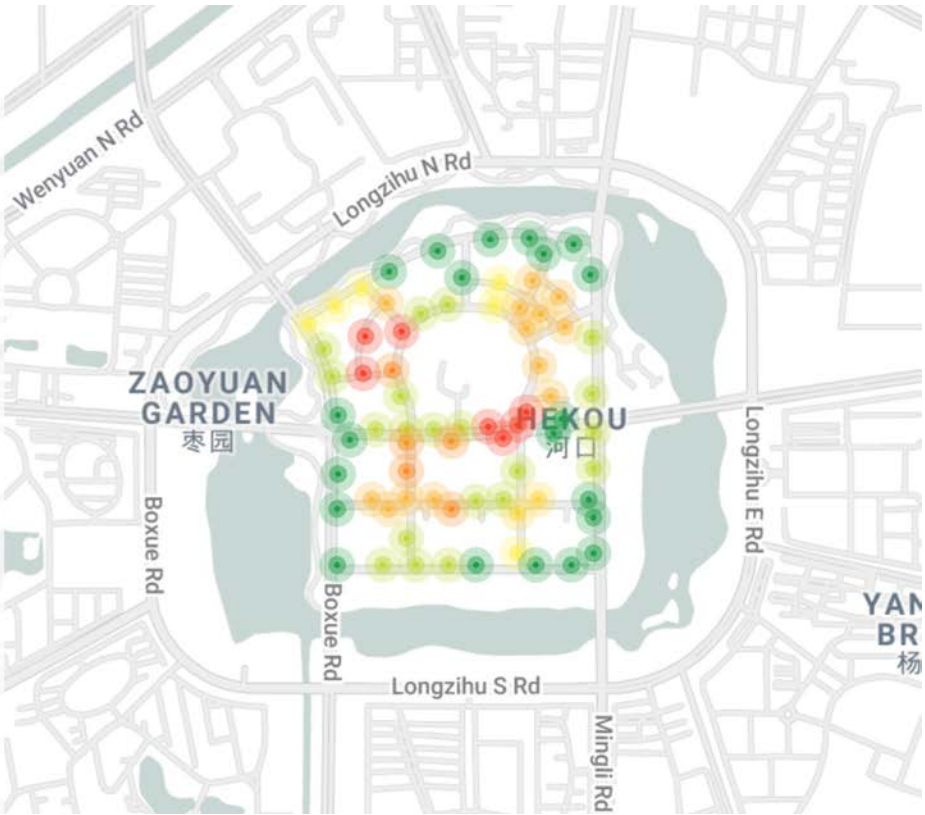


AISLED PILOT STUDY FEATURES

- PMI 2.5, AQI, Humidity, & Temperature Readings
- 4G Network Connectivity
- Real-time Measurements Recording
- Data Visualization
- Can Connect to Existing Infrastructure
- About the size of a bottle of water

HOW AISLED BENEFITS ZHENGDONG

- BETTER UNDERSTAND SOURCES OF THE POLLUTION
- DISCOVER POLLUTION SOURCES
- LEVY FINES AGAINST VIOLATORS
- UNDERSTAND MICROCLIMATES FOR FUTURE DEVELOPMENTS



PILOT PROGRAM

We created a product scope with Techwall Industries to launch a pilot program in Zhengdong New Province of Zhenzhou Municipality. Utilizing Techwall's new outdoor air sensor we proposed a deployment across Innovation Island, a new area in Zhengdong that deploys government backed urban technology.

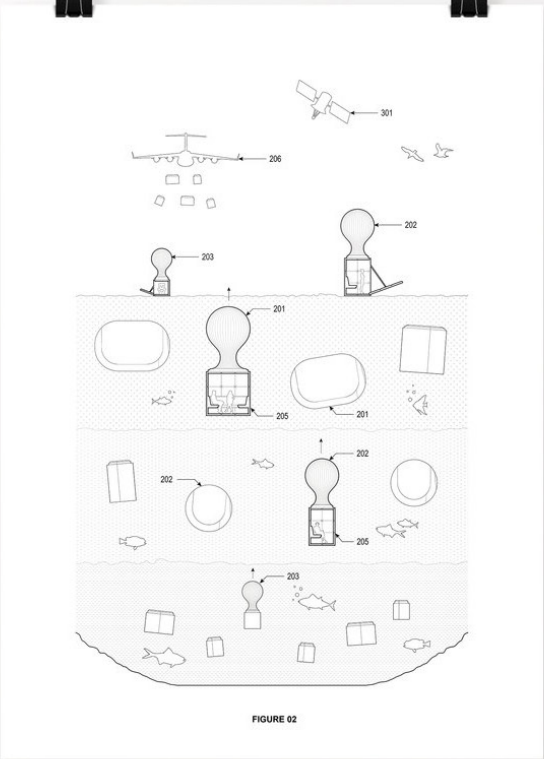


FIGURE 02

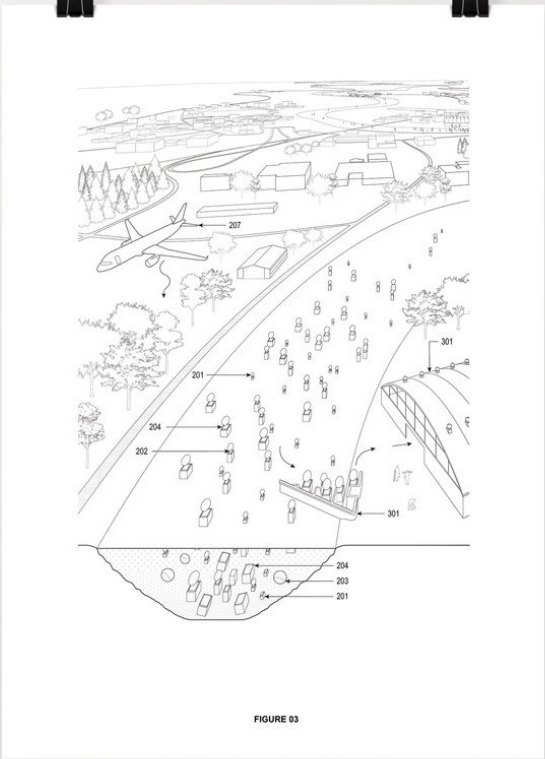


FIGURE 03

IN RIVERS :
THE INSTITUTE OF PATENT INFRINGEMENT

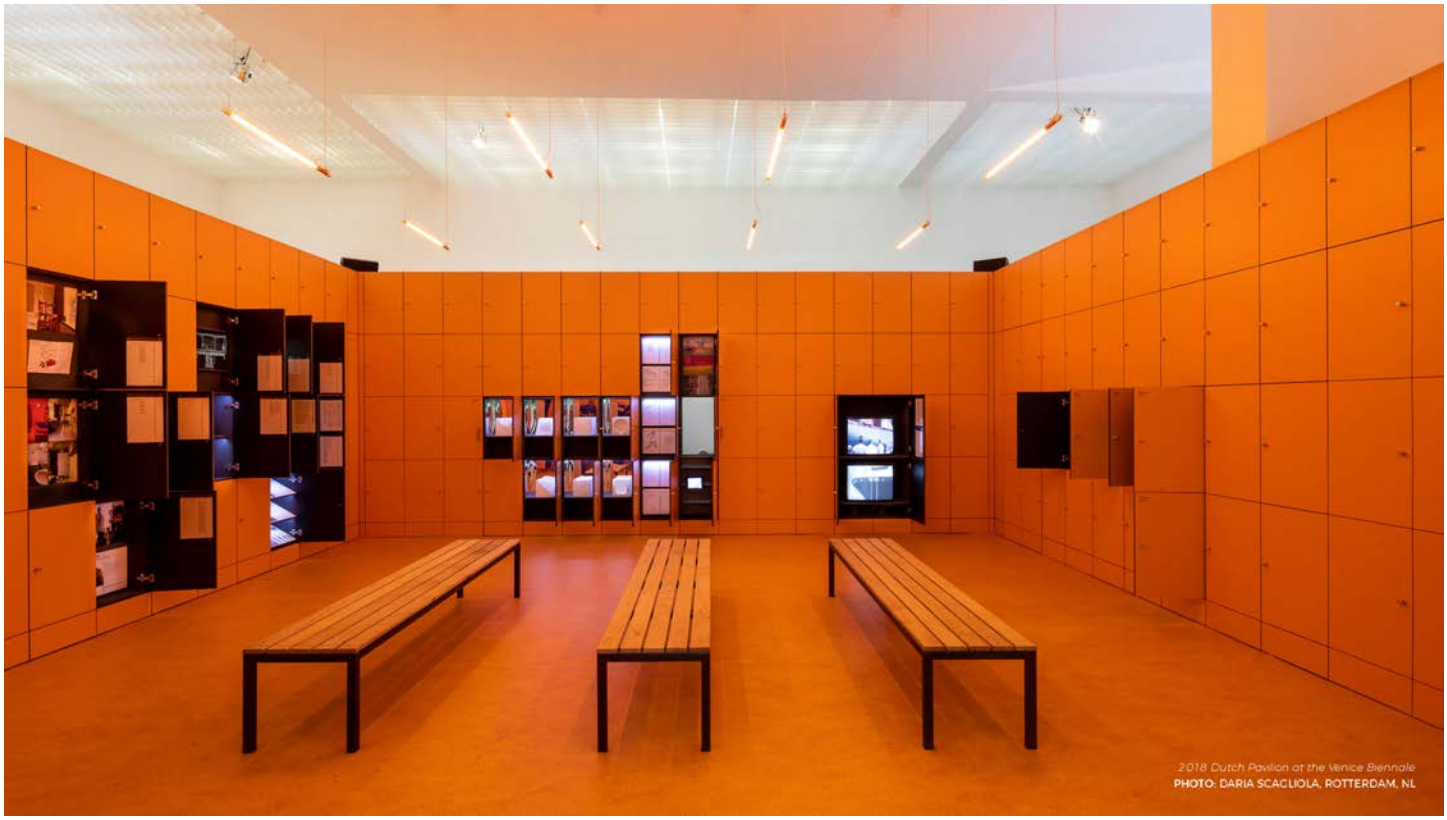
Team : Kyle Branchesi, Darle Shinsato, Calvin Zhong

Recognition : Exhibited in the 2018 Dutch Pavilion at the Venice Biennale, Exhibited in the Victoria and Albert Museum at the 2018 London Design Festival, Exhibited at the Het Nieuwe Instituut

Aquatic Distribution System in Rivers is part of the Institute of Patent Infringement, an initiative by Matthew Stewart and Jane Chew conceived for the Extended Program of 'WORK, BODY, LEISURE,' the Dutch Pavilion at the Venice Biennale 2018, curated by Marina Otero Verzier.

Aquatic Distribution Systems in Rivers exposes the future of aquatic transportation as a multilayered, stratified system, as projected in Amazon's patent 9624034B1 by infringing on the proposed technical systems (depth control devices, local/global positioning systems) and the suggested geophysical inhabitation (urban river settings). The proposal exploits Amazon's underlying narratives, making visible the key technologies, motives, and unforeseen impacts veiled behind the filed, abstracted descriptions and mechanical illustrations afforded by the formality of patents.

Amazon's protected technologies have enabled the corporation to reinvent the infrastructures of our urban environment by commercializing and monetizing them. Consequentially, these infrastructural integrations have rendered the human as digital traces via tracking sensors, cameras, and economic motivations, exchanging human values for mechanic efficiencies. By exposing these technologies, they are highlighted as surveillance devices capable of seeing micro-movements, while simultaneously marginalizing those who have historically been invisible to corporations and producers.
The following illustrations are constructed using the patents as a set of instructions and programmatic requirements to be implemented. Overlaid onto the Connecticut River and connecting the cities with existing Amazon infrastructures, Amazon builds upon existing structures that facilitate its labor, FIG. 01, including Whole Foods 101, Amazon warehouses 102, and airports 103 while introducing a new urbanism within the river. The river infrastructure, shown in section in FIG. 02, includes cubic and spherical pods that will accommodate packages of various sizes 201 and human transportation 202-205 through the interventions of depth control devices and varying of densities 206. This will further enable rapid transportation via airdrops 207 into the river. Upon arrival to its destination, FIG. 03, packages and pods are collected via coordinated mechanical and information systems 301. As technology continues to infiltrate the systems of urban dwelling, the infringement proposes an emerging typology of cohabitation, intertwining modes of inhabitation with distribution, production and consumption.



Dutch Pavilion at theVenice Biennale

London Design Week at the Victoria & Albert Museum

مكتب سمو ولي عهد دبي

THE OFFICE OF H.H. THE CROWN PRINCE OF DUBAI

NAS ARENA : VIP & ROYAL QUARTERS

Firm : The Office of HH The Crown Prince of Dubai

Design Manager : Riccardo Robustini

Designer : Kyle Branchesi

NAS Arena Dubai is a new Arena currently under construction in the Nad Al Sheba District within Dubai, The United Arab Emirates and sits as part of the Nad Al Sheba sports complex. Current expected completion of the project is within 2020. Through request of His Highness Sheikh Hamdan bin Mohammed Al Maktoum, Crown Prince of Dubai, The Office Of H.H. The Crown Prince of Dubai has developed a redesign of the VIP and Royal areas within the arena. The target audience for the design include celebrities, members of the royal family and respected VIP Guests from the UAE and across the world. The total project incorporates design across three floors and falls within a total area of Approximately **5780 M2.**

- To create a contemporary space for VIPs and the Royal Family.
- Expand and open spaces through new layouts and material selections.
- The new design embraces the use of natural light.
- Allow for the flexibility of space which can adapt to current needs.
- Privacy for HH and HH's guests from the entrance to the Royal Suite.
- Utilize current material advancements within the market place.
- High quality design, material selection and project execution.

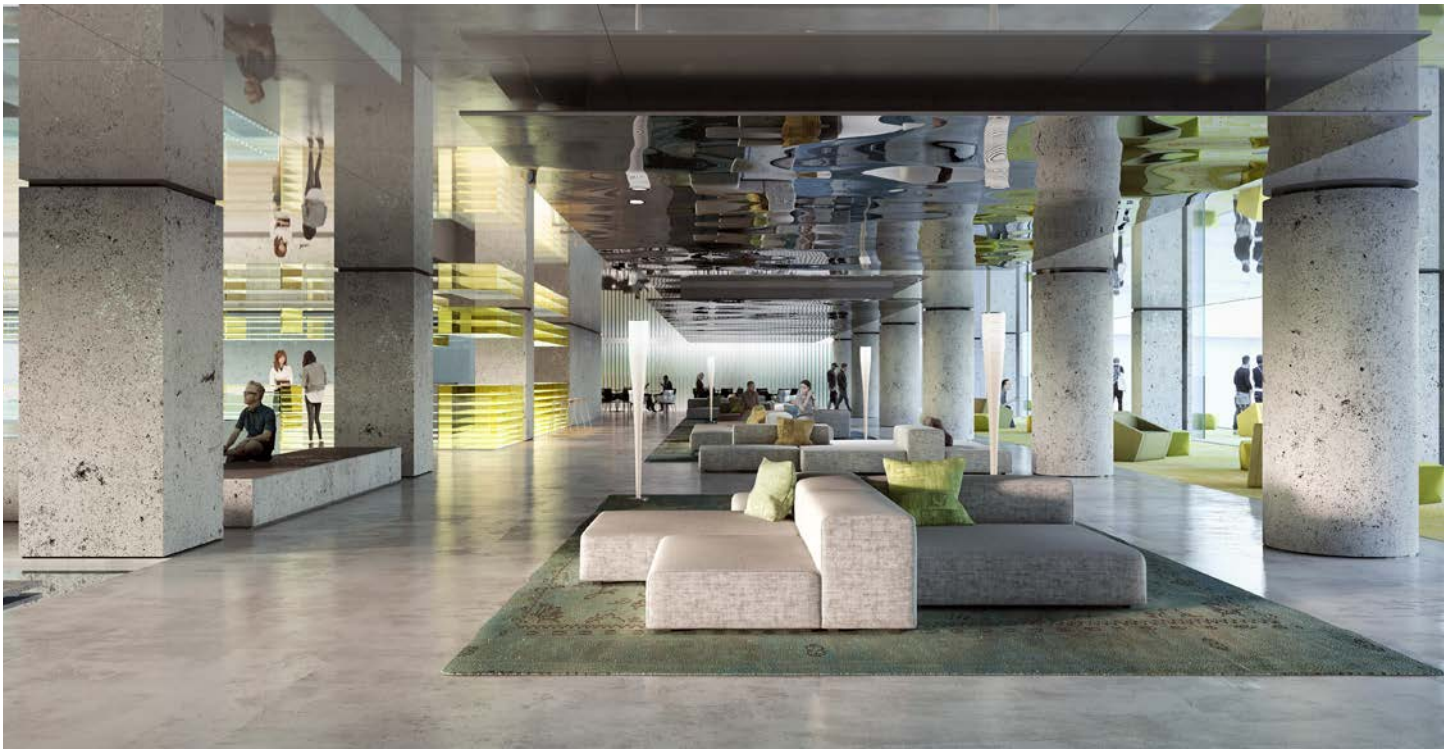
GROUND FLOOR ENTRANCE

The goal of the design was to expand, clean and open up the space creating easier access for VIP guests. The redesigned VIP entrance rearranged the previous layout and areas to create a large open atmosphere, the refocused areas allow a clearer linear passage way for guests.

This begins by centralizing the information desk and aligning the glass entrance facade to the exhisting walls. As you enter you are greeted with a large bright and vibrant space with natural light encorporated above a unique system of acrylic panels. These acrylic panels provide a depth of field which covers the mechanical and sprinkler system above. By centralizing the information desk we are able to provide loung areas in the wings of the lobby while still leaving a large open space. These new lounge areas provide guests with new areas to relax.

Located behind the information counter is direct access to the media lounge, the media lounge provides a large open area which can be utilized for various media functions and press conferences. Within the media lounge reflecteive materials are used to expand the feeling of the space. Linear lights embedded into the flooring, walls and ceiling carry the design direction of the acrylic panels which are found in the entrance lobby.

Aligned with the media lounge is a private majilis for HH and his guests, an automated partition wall allows for HH to have a private space, or to have the space open. Natural light through the use of Coelux systems brighten HHs private majilis and leads to direct passage way into the field. Within HHs private majilis is access to HH's private elevator, which provides access to the Royal Suite and VIP dining above.



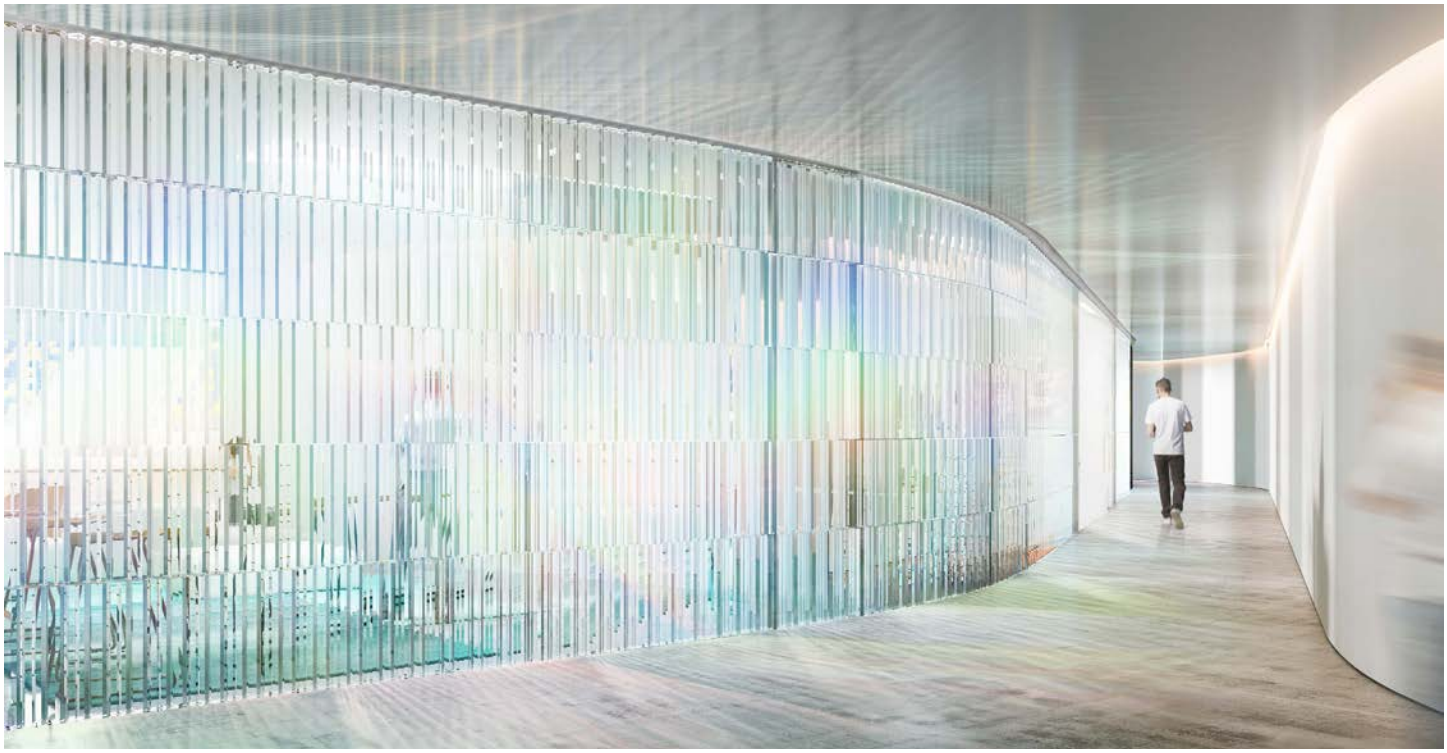
FIRST FLOOR

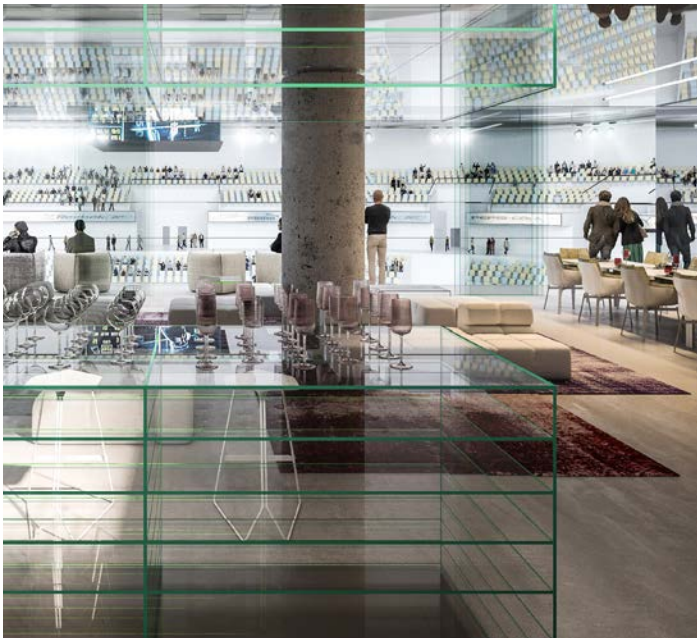
The VIP Dining area is completely reimagined creating many new spaces and allowing for sptectacular views onto the field. Guests enter the dining area through the elevators which have reversed their access presenting guests with unique views out of the glass facade across a new water blade acting as a boundary. Through the process of reversing the direction of the elevator access we are able to utilize and centralize the space of of the current dining floor.

Different areas lay symmetrically off of the central access. A new largely expanded bar sits opposite to a new buffet area. both providing more dining options and facility flexibility that can change depending on the program. As you enter the seating area you have clear and direct view out into the stadium and the field, this is achieved the a replacement of the wall system the previous design utilized.

To the left is a larger dining area and the the right is a new water lounge. The acrylic system within the entrance lobby further greats guests in the water lounge and dining area. Winged off of both areas are stairways that carry guests over the waterblade to the VIP Boxes above.

The material used throughout this floor carry the design aesthetic which greets guests in the entrance floor below. Acrylic is used to create the bar counter, in similar fashion it can also change color and appearance to reflect the current program at the arena. Within the seating area reflective materials are used in a drop down ceiling to expand the feeling of the space while simultaneously masking the ventilation system and sprinklers.





SECOND FLOOR

The Second Floor houses the VIP boxes and the royal suite. Our design aim was to open up the space and create flexible areas which can be utilized and altered depending on the program of the arena. This begins by removing the technical floor which sat above the elevators in the previous design. By removing the technical floor we open up the space connecting the various areas located on the floor, creating a cohesive environment.

As you arrive to the secondfloor via the elevators or the new stairwars from the dining area below, you arrive onto an expanded floor plate which overhangs the waterblade and reaches towards the facade allowing guests views out to the city.

To the left and right of the arrival area are a lounge and a VIP bar which lead to the VIP Boxes corridors. The corridor incorporates natural light and an acrylic wall system which allows for a brightened space. within each VIP Box is an automates partision wall which allow for flexible arrangements. Each VIP Box houses a built in cabinet which contains all mechanical, ventilation, audio and video components creating a clean open area.

The entrace to the Royal Suite is from HH's private elevator. Natural light is provided in the Royal Suite along with a new dining and bar area. The Royal Suite is opened and expanded with a new arrangement allowing for various functions and utilizations.

Material used thoughout the second floor creates a brightened space, opening up visibility while maintaining privacy.

مكتب سمو ولي عهد دبي

THE OFFICE OF H.H. THE CROWN PRINCE OF DUBAI

TAMSCHICK MEDIA+SPACE GMBH

DEEP DIVE DUBAI : VIP & ROYAL QUARTERS

Firm : The Office of HH The Crown Prince of Dubai

Design Manager : Riccardo Robustini

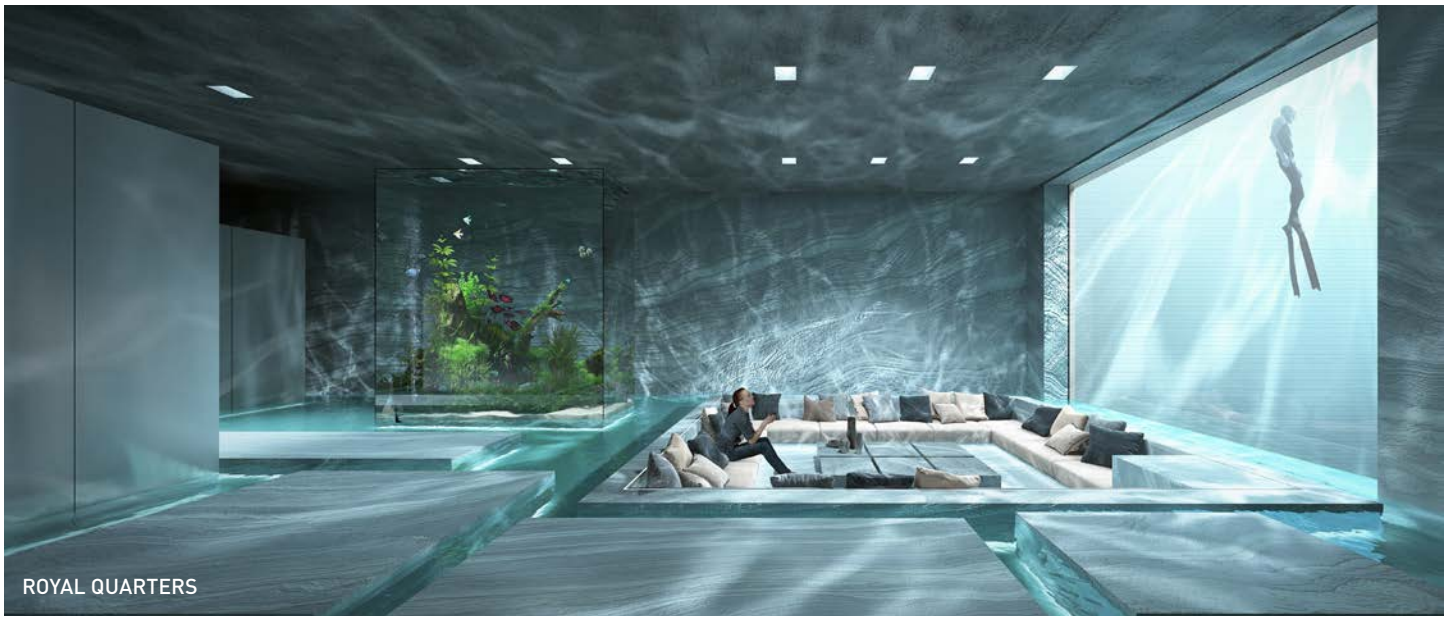
Designer : Kyle Branchesi

Media Consultant : Tamschick

Deep Dive Dubai is a new inland deep diving center currently under construction in the Nad Al Sheba District within Dubai, The United Arab Emirates and sits as part of the Nad Al Sheba sports complex. Current expected completion of the project is within 2019. At 60m deep, it is the world's deepest pool.

Through request of His Highness Sheikh Hamdan bin Mohammed Al Maktoum, Crown Prince of Dubai, The Office Of H.H. The Crown Prince of Dubai has developed a redesign of the VIP and Royal areas within the diving center. The target audience for the design include celebrities, members of the royal family and respected VIP Guests from the UAE and across the world. This project was developed in collaboration with Tamschick as the media consultant.

VIP ENTRANCE



ROYAL QUARTERS

MEDIA ROOM

مكتب سمو ولي عهد دبي

THE OFFICE OF H.H. THE CROWN PRINCE OF DUBAI

RCR ARQUITECTES

AL ARYAM PAVILION at NAD AL SHEBA SAFARI

Client : The Office of HH The Crown Prince of Dubai
Client Design Manager : Riccardo Robustini
Client Design Coordinator : Kyle Branchesi

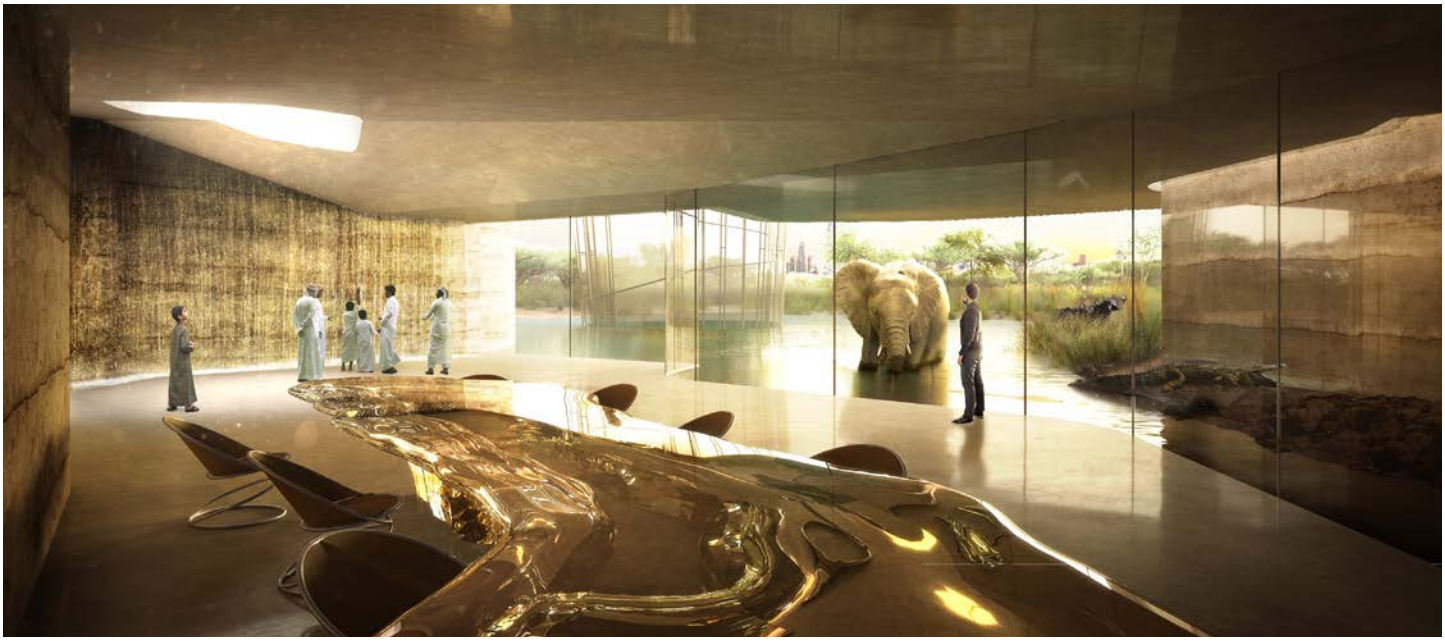
Design Architects : RCR Arquitectes

Al Aryam Pavilion is a new pavilion requested by His Highness Sheikh Hamdan bin Mohammed Al Maktoum, Crown Prince of Dubai. The Office of HH The Crown Prince of Dubai has been tasked with selecting the design architect, overseeing the design development, and maintaining the proejcts scope and budget **(3300 M2, $23M USD)**.

Al Aryam Pavilion will be located within the private Nad Al Sheba Area. The far landscape surrounding the experience is the desert to the west and the skyline of dubai to the north. The project unifies the ensemble, shelters new functions and connects the existing and the new pavilions.

APPROACH

The visitor approaches the main drop-off (at level 0) under the subtle shadows of the pergolas. Along the path, the prince has a glimpse of some of the zoo's ambiences, although the larger view of the Safari is not yet revealed until his highness reaches the main drop-off. There are two ways to gain access: from level 0 (ground floor), arriving to the main drop-off where the visitor has a panoramic view of The Safari; or from level -1 (basement), where there is also a private parking for HH.



DINING

The dinning majili is set inside the land and fosters feelings of shelter, as if being in a cave. This provided an opportunity for the animals to gather around.

ARRIVAL

From either place of arrival, the visitor rises to level 1 (the first floor), at a privileged height. From this point one has direct access to the common areas and the visitor can begin enjoying the different amenities offered to him. The prince can have a taste at the winery, try out a complete meal in one of the restaurants, simply relax in the outdoor lounge area or enjoy the juice bar.

INTERACTION

The pavilion provides a new way of interacting with the animals, an approach that can really make a difference. Because the human-animal contact takes place in the animals' own habitat, within a wide variety of experiences. When the prince enters a majli he can choose at what height to be: he can feel encircled, hung, or rather be feeding the nearby animals.

PIN HOTEL
品 酒 店

ZHULONG PIN HOTEL SHANGHAI

Firm : Gianni Ranaulo Design

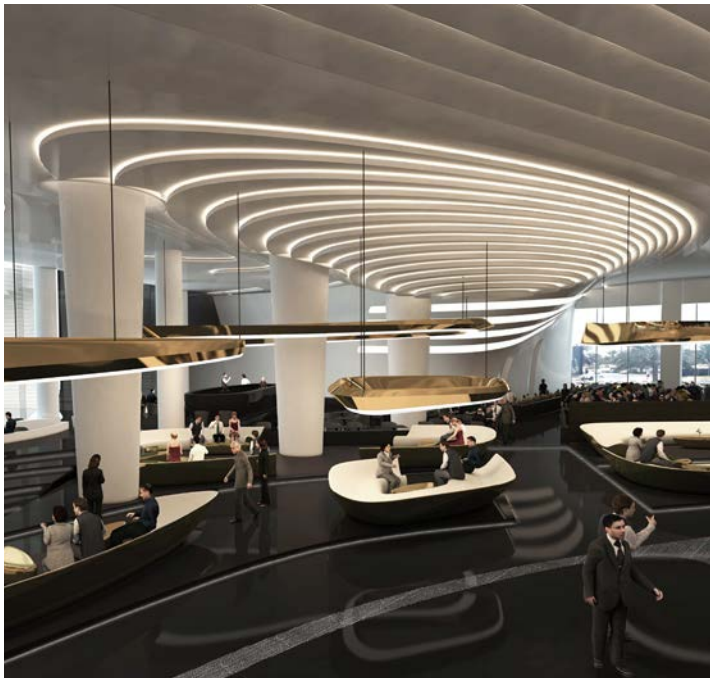
Principal : Gianni Ranaulo

Design Manager : Kyle Branchesi

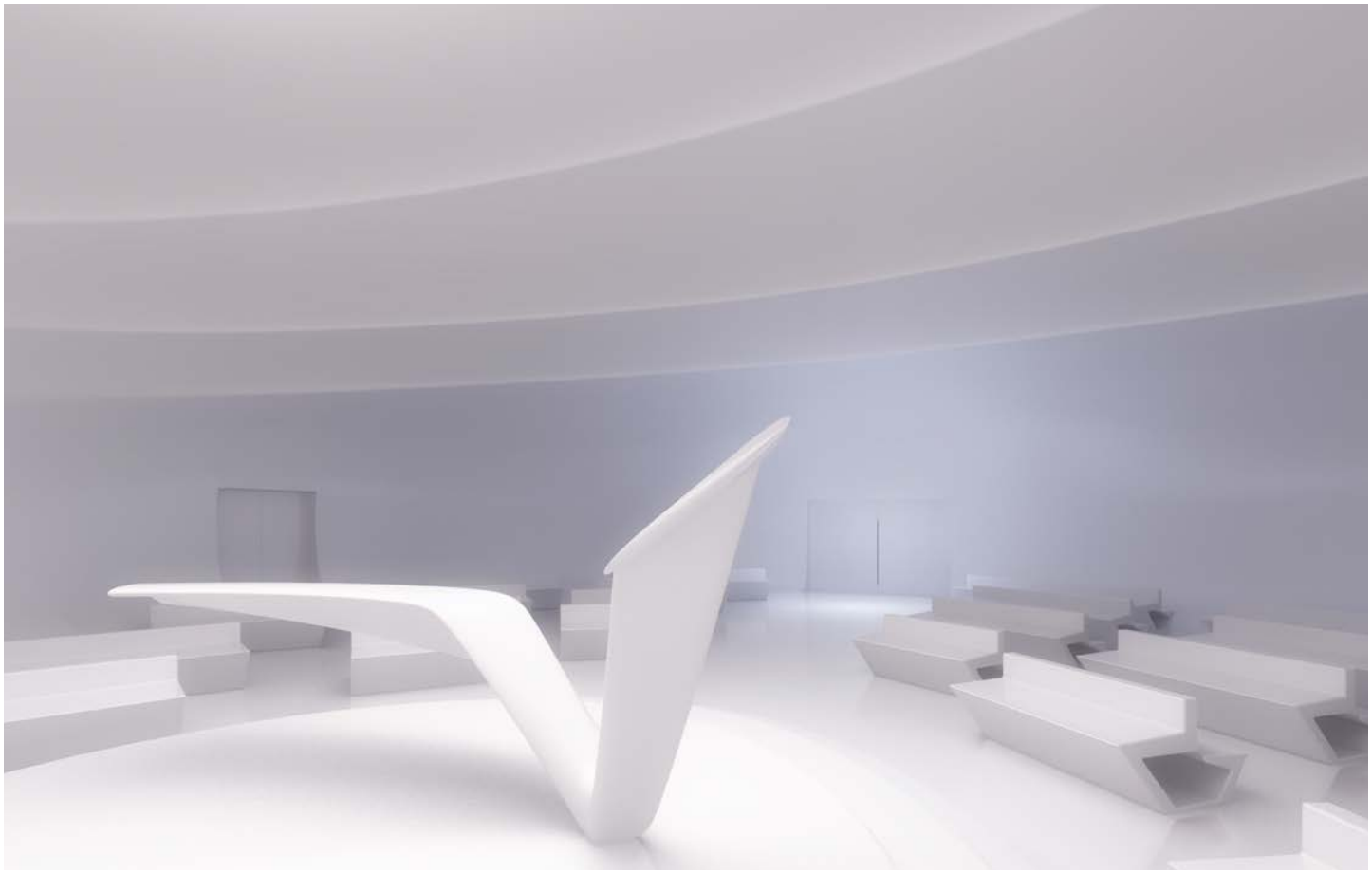
Design Team : Luca Bregni, Irene Menini, Samar Zwaylif , Dana Nabtiti, Mohamed Hussein

This project focuses on the development of an existing office building structure into a new 5-Star concept hotel for the Shanghai Zhulong Group. The project includes a conference center, offices, leisure spaces, retail, restaurants, a spa, and a chapel. The 5-Star Pin Hotel Building is served by two cores, a service core and a public core. The arrival to the hotel occurs surrounding the main external inset garden which is placed at the north side of the building. The 250 hotel rooms are extensively prototyped with custom furniture and materials.

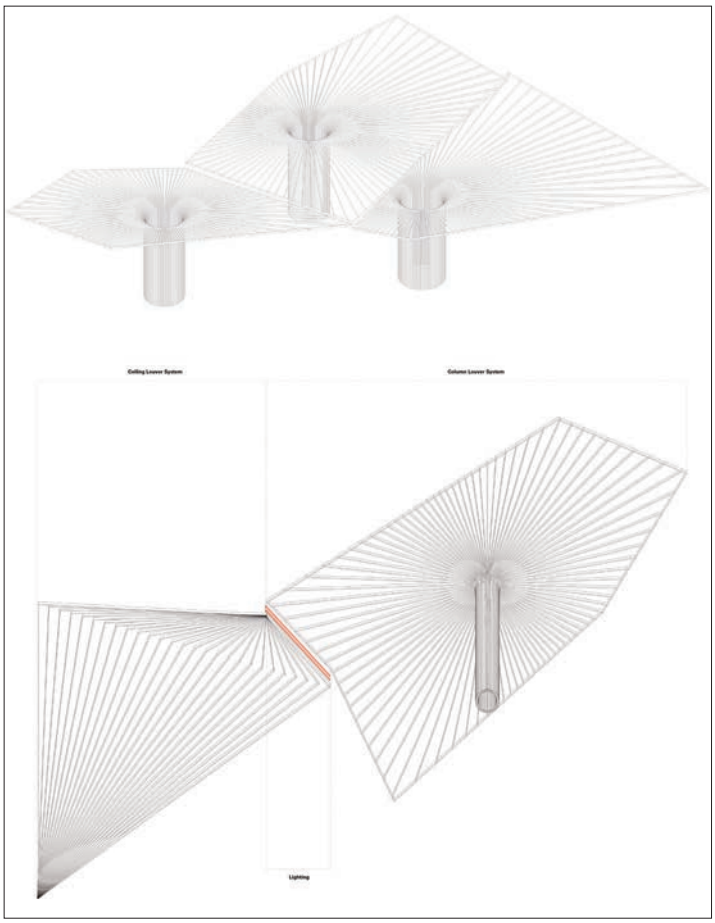
COURT YARD



LOBBY



CHAPEL


Ceiling Louver System
Column Louver System
Lighting


OPEN TO KARAOKEE

FOOD COURT

street view render (produced by tomorrow)

PORSCHE DESIGN TOWER FRANKFURT

Firm : Neil M Denari Architects, Inc

Principal : Neil M Denari

Design Team : Kyle Branchesi, Jeff Chin, Jing Yan

Landscape Consultant : Topotek 1
Structural Consultant : Bollinger + Grohmann
Solar Consultant : Transolar

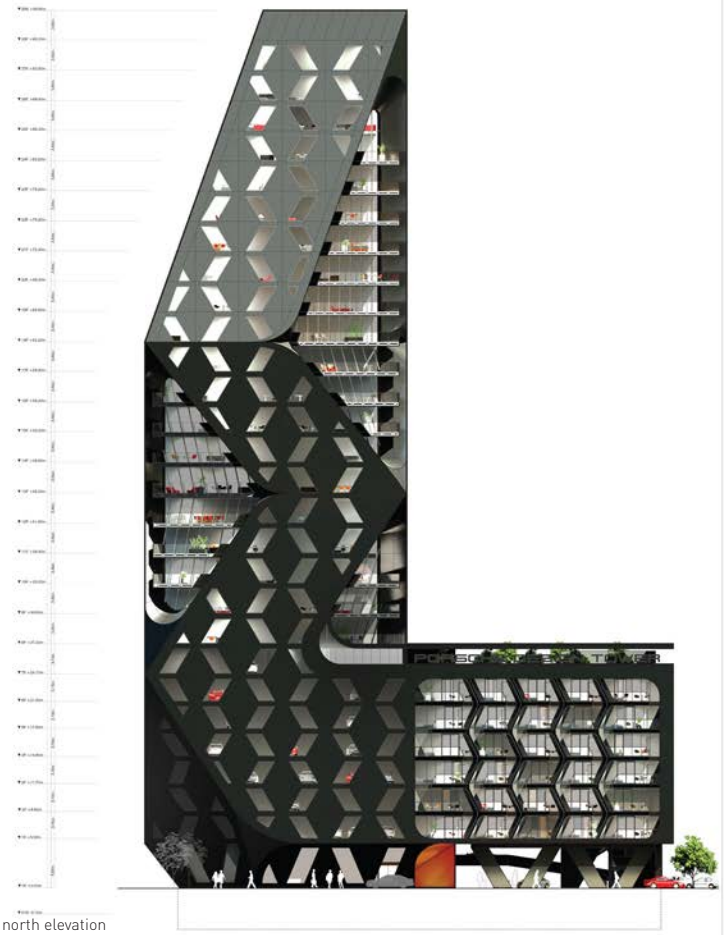
The competition asked for a 100 meter tower with an "exceptionally unique appearance", to mark the entry to the new Europaviertel district of Frankfurt. We considered two identities for a successful design. Porsche Design, a company founded in 1971 as a luxury brand with special focus on functional, timeless and purist design. And Frankfurt, a city known not only for its importance as the financial center of the world, but also as a city that has long embraced the High Rise. Our design approach incorporated, the formal, the structural, and the graphic, NMDA's architectural response to the two identities surrounding the project.

-

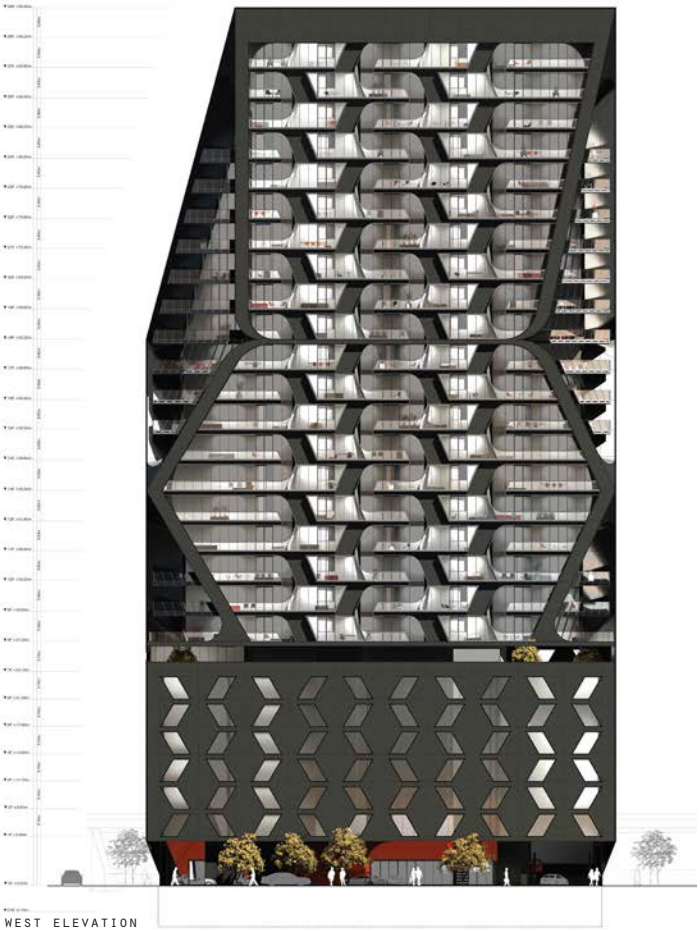
For the new Porsche Design Tower, we have developed a figure through the same operations as the PD logo. The parallelogram is an element that ties together the entire project. The mirrored parallelogram is also used as a punched window system that tracks up the North and South facades. The North and South ends of the tower are formed by large triangular subtractions in the primary block, leading to a recursive, diagonal profile when seen in the oblique.

-

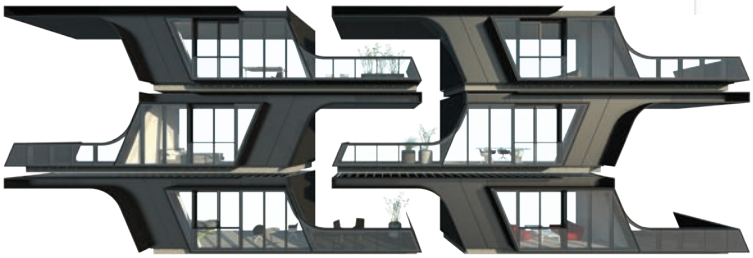
Large V columns support the base at the street level. Making a kind of arcade, these forms create a field of 3D parallelograms through which the visitor moves to reach the lobby of the park to the south. They are a robust expression of structural forces.



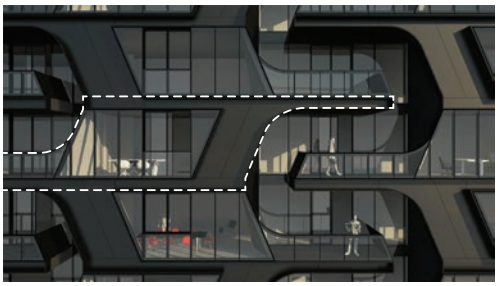
north elevation



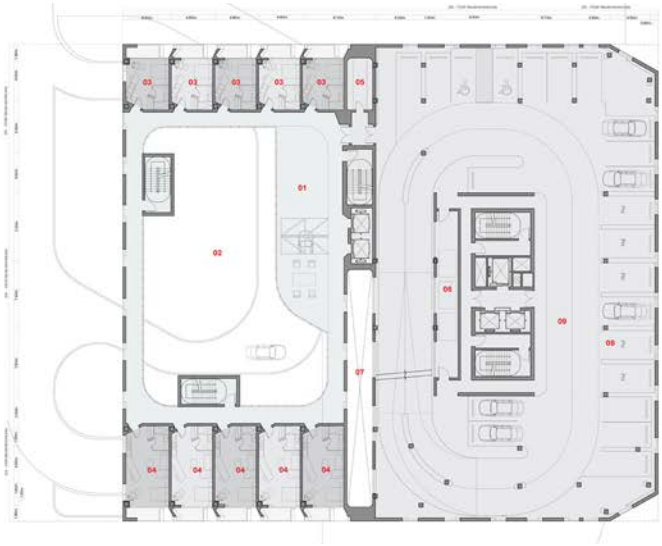
WEST ELEVATION



facade

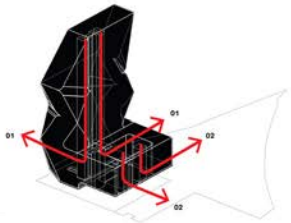


floor plan lvl 0 (ground)

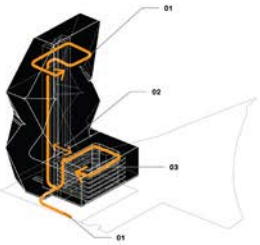


floor plan lvl 1 (porsche design suites)

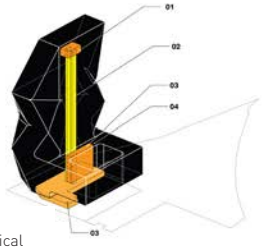
AERIAL RENDER



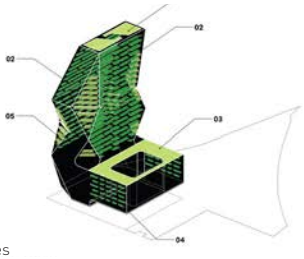
emergency exits



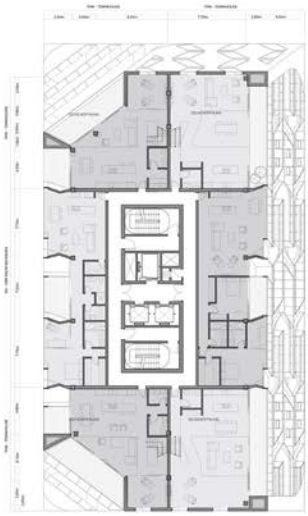
circulation



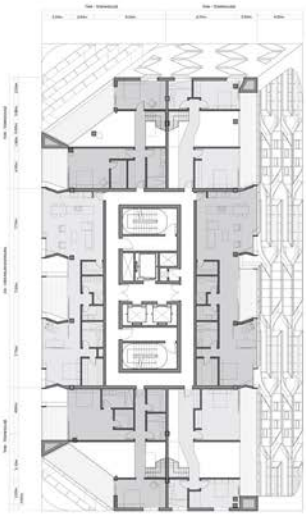
mechanical



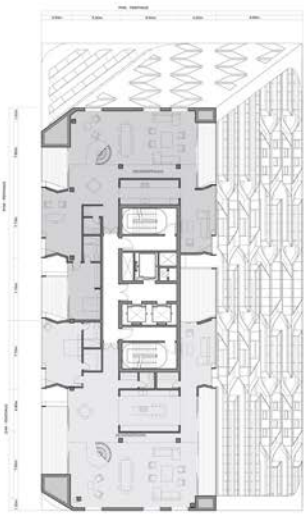
terraces



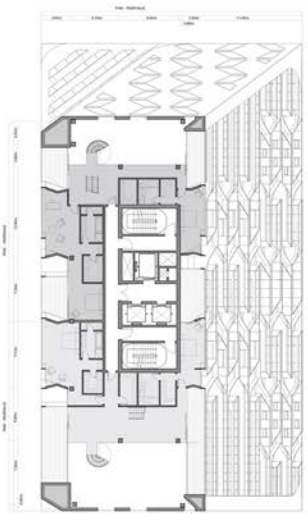
floor plan lvl 21



floor plan lvl 22



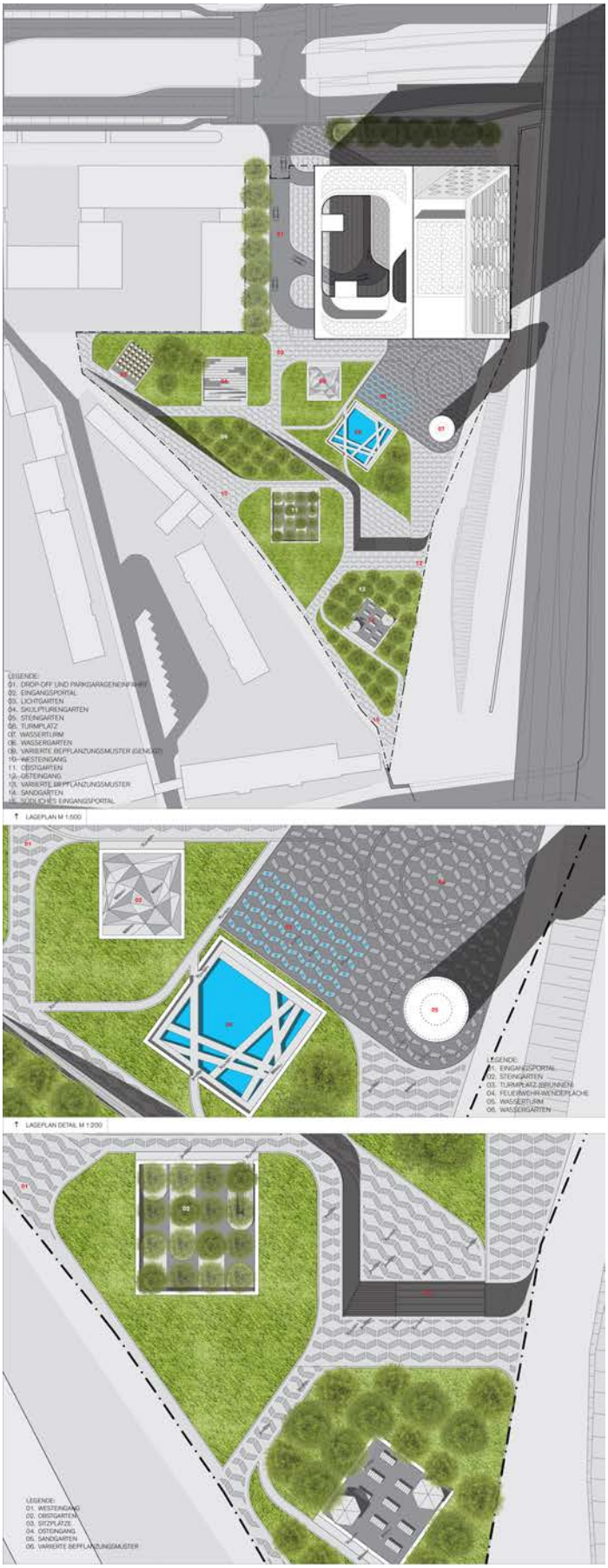
floor plan lvl 25



floor plan lvl 26

north - south section

east - west section



park development

FACTORe : PSA PEUGEOT CITROËN

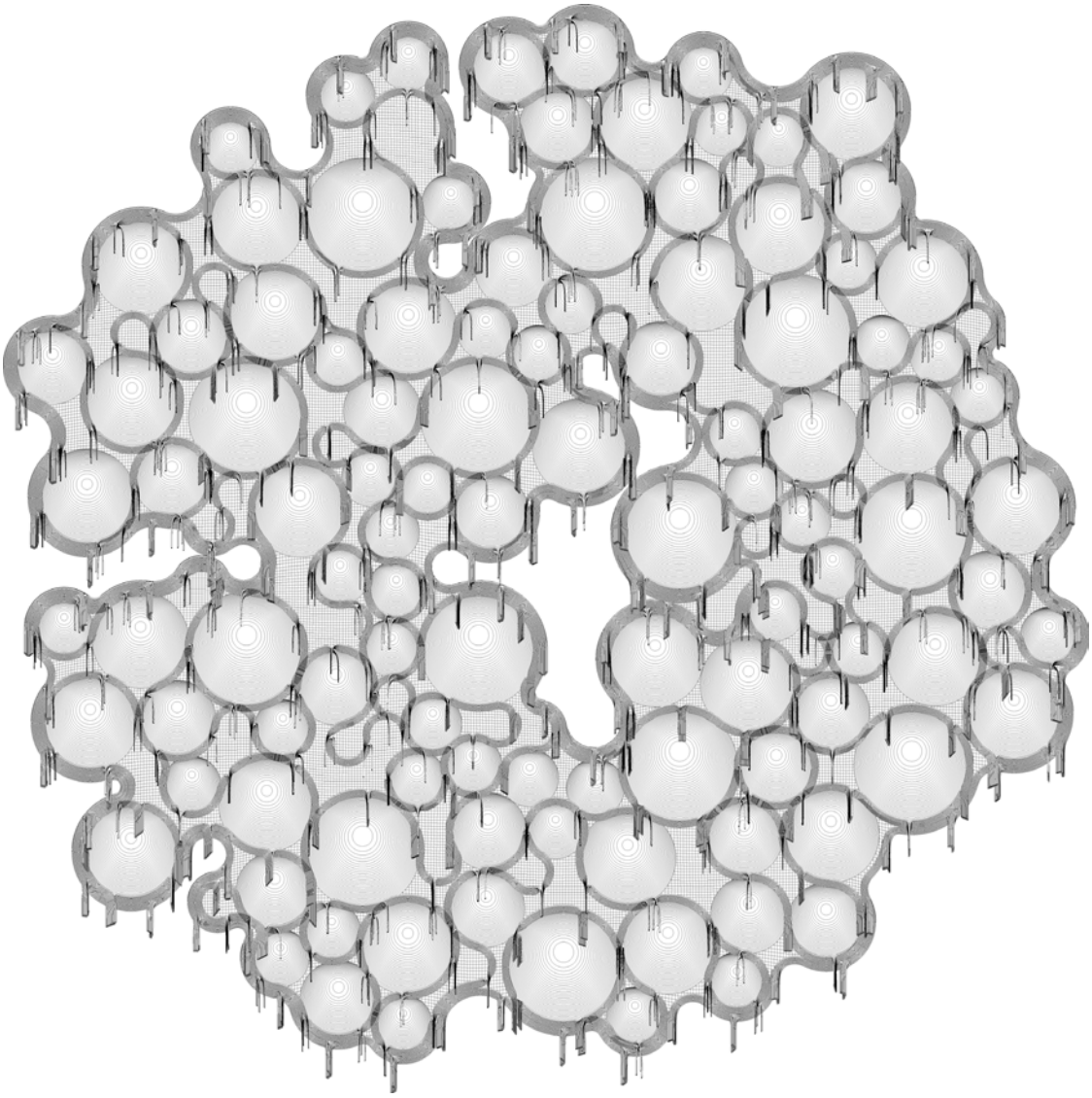
Firm : Testa / Weiser

Principals : Peter Testa, Devyn Weiser

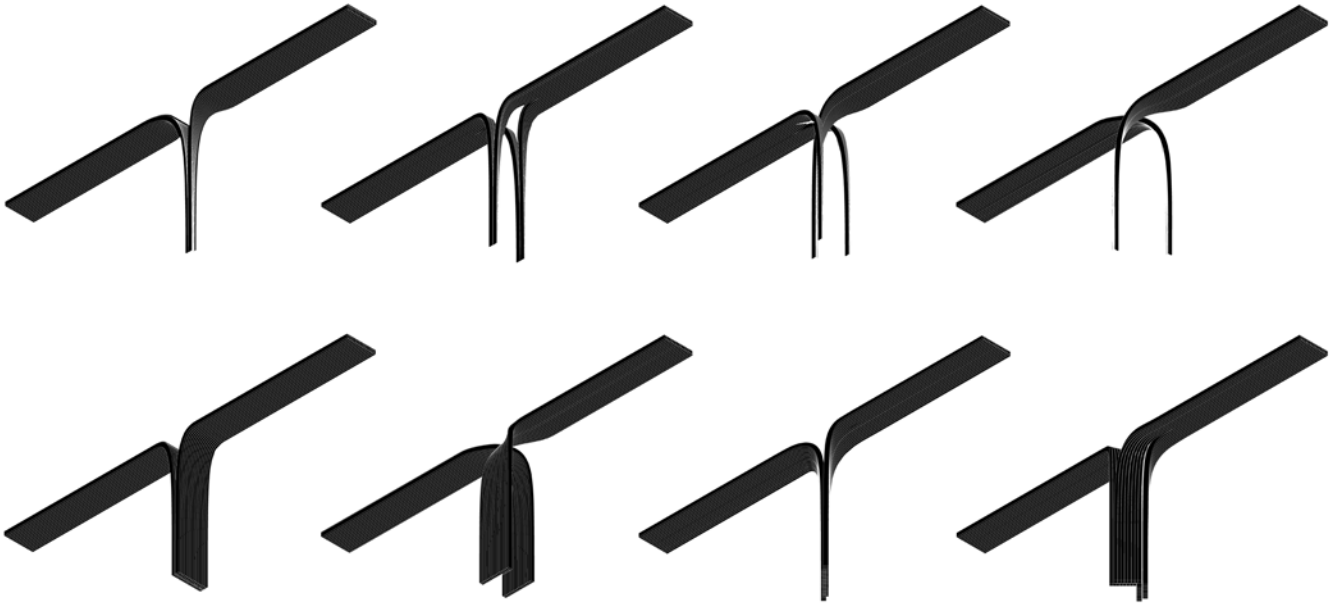
Design Team: Kyle Branchesi, Anass Benhachmi, Rangel Karaivanov, Haleh Olfati

The heart of FACTORe is a series of polyspherical robotic fabrication cells where a new type of body shell is fabricated with additive materials.
Using fast curing nano-polymers reinforced with nano-fibers, the body shell is produced within a microencapsulated and highly controlled synthetic robotic environment. This innovative process allows for rapid manufacture of extremely precise complex surfaces and structures. The process eliminates all sheet metal pressing, cutting, bending, and welding as well as the environmentally damaging, time, and space consuming paint processes. As a result the body shell is formed in a continuous process and robotically mated to the drive module. This radical rethinking of conventional shaping logics and fabrication logistics combines synergistically with the new chassis logic of self-driving electric vehicles.

FACTORe realizes factor ten reductions in energy consumption across the whole manufacturing and supply chain in both the transportation sector and the construction industry. Materials innovation currently being applied to the transportation sector in the area of fiber composites is leap frogged into the construction industry making way for the introduction and development of even lighter and stronger nano-composites and micro robotics in the automotive sector. These material innovations support the development of radical new shaping logics and formal expressions and yield unprecedented levels of design quality and environmental performance.



Ceiling & Columns



Column Variation